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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS
     1
                 Web Page URLs for STN Seminar Schedule - N. America
        Apr 08
NEWS
                 "Ask CAS" for self-help around the clock
NEWS
        Jun 03
                 New e-mail delivery for search results now available
NEWS
         Aug 08
                 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS
         Aug 19
                 Aquatic Toxicity Information Retrieval (AQUIRE)
                 now available on STN
NEWS
        Aug 26
                 Sequence searching in REGISTRY enhanced
NEWS
        Sep 03
                JAPIO has been reloaded and enhanced
NEWS 8
        Sep 16 Experimental properties added to the REGISTRY file
NEWS 9
        Sep 16
                CA Section Thesaurus available in CAPLUS and CA
NEWS 10 Oct 01
                CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11
        Oct 24
                BEILSTEIN adds new search fields
NEWS 12
        Oct 24
                Nutraceuticals International (NUTRACEUT) now available on STN
        Nov 18
NEWS 13
                DKILIT has been renamed APOLLIT
NEWS 14 Nov 25
                More calculated properties added to REGISTRY
NEWS 15 Dec 04
                CSA files on STN
NEWS 16 Dec 17
                 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 17
        Dec 17
                TOXCENTER enhanced with additional content
NEWS 18
        Dec 17
                Adis Clinical Trials Insight now available on STN
NEWS 19
        Jan 29
                 Simultaneous left and right truncation added to COMPENDEX,
                 ENERGY, INSPEC
NEWS 20
        Feb 13
                CANCERLIT is no longer being updated
NEWS 21 Feb 24
                METADEX enhancements
NEWS 22
        Feb 24
                PCTGEN now available on STN
NEWS 23
        Feb 24
                TEMA now available on STN
NEWS 24
        Feb 26 NTIS now allows simultaneous left and right truncation
NEWS 25
        Feb 26
                PCTFULL now contains images
NEWS 26
        Mar 04
                SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 27
        Mar 20
                EVENTLINE will be removed from STN
NEWS 28
        Mar 24
                 PATDPAFULL now available on STN
NEWS 29
        Mar 24
                Additional information for trade-named substances without
                 structures available in REGISTRY
NEWS 30
        Apr 11
                Display formats in DGENE enhanced
        Apr 14
NEWS 31
                MEDLINE Reload
NEWS 32
        Apr 17
                 Polymer searching in REGISTRY enhanced
NEWS 33
                Indexing from 1947 to 1956 being added to records in CA/CAPLUS
        Apr 21
                New current-awareness alert (SDI) frequency in
NEWS 34
        Apr 21
                 WPIDS/WPINDEX/WPIX
NEWS 35
        Apr 28
                RDISCLOSURE now available on STN
NEWS 36
        May 05
                Pharmacokinetic information and systematic chemical names
                 added to PHAR
NEWS 37
        May 15
                MEDLINE file segment of TOXCENTER reloaded
NEWS 38
        May 15
                Supporter information for ENCOMPPAT and ENCOMPLIT updated
                CHEMREACT will be removed from STN
NEWS 39
        May 16
NEWS 40
        May 19
                Simultaneous left and right truncation added to WSCA
        May 19 RAPRA enhanced with new search field, simultaneous left and
NEWS 41
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Welcome to STN International

right truncation

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

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=> file reg
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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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Uploading 10049823.str

L1 STRUCTURE UPLOADED

=> s 11 SAMPLE SEARCH INITIATED 14:18:20 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED -

2 TO ITERATE

100.0% PROCESSED

2 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE **COMPLETE**

BATCH

COMPLETE

PROJECTED ITERATIONS:

2 TO 124

PROJECTED ANSWERS:

0 TO 0

L2

O SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 14:18:33 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 46 TO ITERATE

100.0% PROCESSED

46 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

L3

2 SEA SSS FUL L1

=> d scan

L3 2 ANSWERS REGISTRY COPYRIGHT 2003 ACS

MF C42 H56 O7 Si

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L3 2 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN L-arabino-L-allo-Pentadec-6-enitol, 2,7:9,13-dianhydro-4,5,6,8,14pentadeoxy-10-O-[(1,1-dimethylethyl)dimethylsilyl]-15-O-(methoxymethyl)11,12-bis-O-(phenylmethyl)-1,3-O-[(R)-phenylmethylene]- (9CI)

MF C44 H60 O9 Si

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus COST IN U.S. DOLLARS

FULL ESTIMATED COST

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FILE COVERS 1907 - 23 May 2003 VOL 138 ISS 22 FILE LAST UPDATED: 22 May 2003 (20030522/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13 and (prepar? or synthes? or make or made or process)

6 L3

1401752 PREPAR?

105014 PREP

1884 PREPS

106706 PREP

(PREP OR PREPS)

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10/049,823
       1802532 PREPD
            21 PREPDS
       1802547 PREPD
                 (PREPD OR PREPDS)
         89007 PREPG
            12 PREPGS
         89018 PREPG
                 (PREPG OR PREPGS)
       2309463 PREPN
        183748 PREPNS
       2450448 PREPN
                 (PREPN OR PREPNS)
       4132690 PREPAR?
                 (PREPAR? OR PREP OR PREPD OR PREPG OR PREPN)
       1291701 SYNTHES?
        173342 MAKE
        129462 MAKES
        295471 MAKE
                 (MAKE OR MAKES)
       1049766 MADE
            22 MADES
       1049785 MADE
                 (MADE OR MADES)
       1806803 PROCESS
       1172688 PROCESSES
       2670629 PROCESS
                 (PROCESS OR PROCESSES)
L4
             6 L3 AND (PREPAR? OR SYNTHES? OR MAKE OR MADE OR PROCESS)
=> s 14 and catalyst
        625179 CATALYST
        625065 CATALYSTS
        800032 CATALYST
                 (CATALYST OR CATALYSTS)
L5
             4 L4 AND CATALYST
=> d l4 ibib hitstr abs 1-6
    ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER:
                         2002:150043 CAPLUS
DOCUMENT NUMBER:
                         137:93629
TITLE:
                         A general strategy for the convergent
                         synthesis of fused polycyclic ethers via
                         B-alkyl Suzuki coupling: synthesis of the
                         ABCD ring fragment of ciguatoxins
AUTHOR (S):
                         Sasaki, Makoto; Ishikawa, Makoto; Fuwa, Haruhiko;
                         Tachibana, Kazuo
CORPORATE SOURCE:
                         Graduate School of Science, Department of Chemistry,
                         The University of Tokyo, and CREST, Japan Science and
                         Technology Corporation (JST), Hongo, Bunkyo-ku, Tokyo,
                         113-0033, Japan
SOURCE:
                         Tetrahedron (2002), 58(10), 1889-1911
```

RL: SPN (Synthetic preparation); PREP (Preparation)

Journal

English

PUBLISHER:

LANGUAGE:

DOCUMENT TYPE:

OTHER SOURCE(S):

250226-82-5P

CODEN: TETRAB; ISSN: 0040-4020

Elsevier Science Ltd.

CASREACT 137:93629

(synthesis of the ABCD ring subunit of ciguatoxins via convergent synthesis of fused polycyclic ethers using B-alkyl Suzuki coupling)

RN 250226-82-5 CAPLUS

CN L-arabino-L-allo-Pentadec-6-enitol, 2,7:9,13-dianhydro-4,5,6,8,14-pentadeoxy-10-0-[(1,1-dimethylethyl)dimethylsilyl]-15-0-(methoxymethyl)-11,12-bis-0-(phenylmethyl)-1,3-0-[(R)-phenylmethylene]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

AB A new method for convergent coupling of fused polycyclic ethers has been developed, which relies on B-alkyl Suzuki cross-coupling of lactone-derived enol triflates or phosphates. The strategy was successfully applied to a convergent synthesis of the ABCD ring fragment 4 of ciguatoxins, the causative toxin for ciguatera fish poisoning. The synthetic route includes a convergent union of the B and D rings by the B-alkyl Suzuki coupling, introduction of a double bond into the D ring followed by reductive closure of the tetrahydropyran C ring to afford the BCD ring system, and, finally, ring-closing metathesis reaction to construct the oxepene A ring.

REFERENCE COUNT:

THERE ARE 150 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS

150

ACCESSION NUMBER:

2001:935611 CAPLUS

DOCUMENT NUMBER:

136:53638

TITLE:

Process for preparing cyclic

polyethers

INVENTOR(S):
PATENT ASSIGNEE(S):

Sasaki, Makoto; Tachibana, Kazuo; Fuwa, Haruhiko Japan Science and Technology Corporation, Japan

SOURCE:

PCT Int. Appl., 18 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION, NO. DATE ------------- - - ------WO 2001098308 WO 2001-JP1872 20011227 Α1 20010309 W: CA, US JP 2002003494 20020109 A2 JP 2000-182148 20000616

PRIORITY APPLN. INFO.:

JP 2000-182148 A 20000616

OTHER SOURCE(S):

CASREACT 136:53638

IT 315203-88-4P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (process for prepg. cyclic polyethers)

RN 315203-88-4 CAPLUS

CN Silane, (1,1-dimethylethyl)dimethyl[[(2R,3S,5R,6S)-tetrahydro-5-(phenylmethoxy)-6-[2-(phenylmethoxy)ethyl]-2-[[(2R,4aR,9aS)-4a,8,9,9a-tetrahydro-2-phenyl-4H-1,3-dioxino[5,4-b]oxepin-6-yl]methyl]-2H-pyran-3-yl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

AB This document discloses a process for synthesizing cyclic polyether skeletons convergently without using an excess of a phosphate at room temp. in high yield, which process is applicable to the synthesis of gambierol and ciguatoxin. This process comprises cross-coupling an alkylborane with a cyclic ketene acetal phosphate in the presence of an aq. basic soln. by using chloro[1,1'-bis(diphenylphosphino)ferrocene]palladium as the catalyst.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:531967 CAPLUS

DOCUMENT NUMBER:

135:122407

TITLE:

Preparation of (large-membered) cyclic

polyethers from alkylboranes and cyclic enol

phosphates

INVENTOR(S):

Sasaki, Makoto; Fuwa, Haruhiko; Tachibana, Kazuo

PATENT ASSIGNEE(S): Foundation for Scientific Technology Promotion, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 12 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001199987	A2	20010724	JP 2000-12277	20000120
PRIORITY APPLN. INFO.	:	JP	2000-12277	20000120
OTHER SOURCE(S):	CA	SREACT 135:1224	07	

IT 250226-82-5P

RL: IMF (Industrial manufacture); PREP (Preparation) (prepn. of cyclic polyethers from alkylboranes and cyclic enol phosphates)

RN 250226-82-5 CAPLUS

CN L-arabino-L-allo-Pentadec-6-enitol, 2,7:9,13-dianhydro-4,5,6,8,14-pentadeoxy-10-0-[(1,1-dimethylethyl)dimethylsilyl]-15-0-(methoxymethyl)-11,12-bis-O-(phenylmethyl)-1,3-O-[(R)-phenylmethylene]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

GΙ

AB Title compds., which are intermediates for (large-membered) cyclic polyethers, e.g. ciguatoxin 3C, are prepd. by cross-coupling of alkylboranes with cyclic enol phosphates in the presence of Pd(0) compd. having phosphine ligands as catalysts in basic aq. solns. Thus, exo-olefin I was treated with 9-BBN at 60.degree. in THF and treated with NaHCO3, Pd(PPh3)4, and cyclic enol phosphate II at 50.degree. for 20 h in DMF to give 98% cyclic polyether III.

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:279190 CAPLUS

DOCUMENT NUMBER: 135:76718

TITLE: Synthetic studies on a marine polyether toxin,

gambierol: stereoselective synthesis of the EFGH ring system via B-alkyl Suzuki coupling

AUTHOR(S): Fuwa, H.; Sasaki, M.; Tachibana, K.

CORPORATE SOURCE: Graduate School of Science, Department of Chemistry,

Japan Science and Technology Corporation (JST), CREST, The University of Tokyo, Bunkyo-ku, Tokyo, 113-0033,

Japan

SOURCE: Tetrahedron (2001), 57(15), 3019-3033

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:76718

IT 315203-88-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthetic studies on a marine polyether toxin, gambierol, stereoselective synthesis of EFGH ring system via B-alkyl

Suzuki coupling)

RN 315203-88-4 CAPLUS
CN Silane, (1,1-dimethylethyl)dimethyl[[(2R,3S,5R,6S)-tetrahydro-5-

(phenylmethoxy) -6-[2-(phenylmethoxy)ethyl]-2-[[(2R,4aR,9aS)-4a,8,9,9a-tetrahydro-2-phenyl-4H-1,3-dioxino[5,4-b]oxepin-6-yl]methyl]-2H-pyran-3-

yl]oxy] - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

GΙ

AB A synthetic route to the EFGH ring system I of gambierol, a marine polyether toxin isolated from the dinoflagellate Gambierdiscus toxicus, has been developed. The present synthesis features convergent coupling of the F and H rings followed by ring-closure of the G ring based on the B-alkyl Suzuki reaction of lactone-derived enol phosphates. An angular Me group at C23 was stereoselectively introduced by treatment of sulfone II with trimethylaluminum. Installation of a tertiary alc. at C21 was accomplished through stereoselective dihydroxylation of exo-methylene III followed by selective formation of the primary p-toluensulfonate and treatment of the resultant monotosylate with lithium aluminum hydride. Finally, formation of the E ring as a lactone form completed the synthesis of I.

REFERENCE COUNT:

THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:833976 CAPLUS

DOCUMENT NUMBER:

134:71431

TITLE:

Synthetic studies on a marine polyether toxin, gambierol: stereoselective synthesis of the

AUTHOR (S):

SOURCE:

CORPORATE SOURCE:

FGH ring system via B-alkyl Suzuki coupling Fuwa, Haruhiko; Sasaki, Makoto; Tachibana, Kazuo -

Department of Chemistry, Graduate School of Science, The University of Tokyo, Japan Science and Technology

Corporation (JST), Tokyo, 113-0033, Japan

Tetrahedron Letters (2000), 41(43), 8371-8375

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE: LANGUAGE: Journal English

OTHER SOURCE(S):

CASREACT 134:71431

IT 315203-88-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(stereoselective **prepn**. of the gambierol FGH ring system via B-alkyl Suzuki coupling)

RN 315203-88-4 CAPLUS

CN Silane, (1,1-dimethylethyl)dimethyl[[(2R,3S,5R,6S)-tetrahydro-5-(phenylmethoxy)-6-[2-(phenylmethoxy)ethyl]-2-[[(2R,4aR,9aS)-4a,8,9,9a-tetrahydro-2-phenyl-4H-1,3-dioxino[5,4-b]oxepin-6-yl]methyl]-2H-pyran-3-yl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

GΙ

AB A synthetic route to the FGH ring system of gambierol, a marine polyether toxin isolated from the dinoflagellate Gambierdiscus toxicus, has been developed. The present **synthesis** features B-alkyl Suzuki coupling of the F and H rings, followed by ring-closure of the G ring and stereoselective installation of 1,3-diaxial Me groups at C21 and C23 to yield I in 75% yield.

Ι

REFERENCE COUNT:

THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1999:580096 CAPLUS

34

DOCUMENT NUMBER:

131:351146

TITLE:

A General Method for Convergent Synthesis of

Polycyclic Ethers Based on Suzuki Cross-Coupling:

Concise Synthesis of the ABCD Ring System of

Ciguatoxin

AUTHOR (S):

Sasaki, Makoto; Fuwa, Haruhiko; Ishikawa, Makoto;

Tachibana, Kazuo

CORPORATE SOURCE:

Department of Chemistry School of Science, The

University of Tokyo CREST Japan Science and Technology Corporation (JST), Hongo Bunkyo-ku Tokyo, 113-0033,

Japan

SOURCE: Organic Letters (1999), 1(7), 1075-1077

CODEN: ORLEF7; ISSN: 1523-7060

American Chemical Society

PUBLISHER: DOCUMENT TYPE:

Journal English

LANGUAGE:

ΙT 250226-82-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of the ABCD ring system of ciguatoxin via Suzuki

cross-coupling)

250226-82-5 CAPLUS RN

CN L-arabino-L-allo-Pentadec-6-enitol, 2,7:9,13-dianhydro-4,5,6,8,14pentadeoxy-10-0-[(1,1-dimethylethyl)dimethylsilyl]-15-0-(methoxymethyl)-

11,12-bis-O-(phenylmethyl)-1,3-O-[(R)-phenylmethylene]- (9CI) (CA INDEX

NAME)

Absolute stereochemistry. Rotation (+).

GΙ

H

ÓBn

III

AB A general method for convergent assembly of polyether structure has been developed based on palladium(0)-mediated Suzuki cross-coupling reaction of alkylboranes (I) with cyclic ketene acetal phosphates (II). The present method allowed for coupling of medium-sized ether rings and thus a concise synthesis of the ABCD ring system (III) of ciguatoxins has been achieved.

REFERENCE COUNT:

THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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chain nodes :
 18 19 20 21 22 23 24 25 26 27 28
ring nodes :
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
chain bonds :
 2-19 3-25 3-26 5-20 5-24 6-18 9-20 11-22 12-23 16-21 26-27 27-28
ring bonds :
 1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-13 8-9 9-10 10-11 11-12 11-14 12-13 12-17
 14-15 15-16 16-17
exact/norm bonds :
 2-19 6-18 27-28
exact bonds :
 1-2 1-6 2-3 3-4 3-25 3-26 4-5 5-6 5-20 5-24 7-8 7-13 8-9 9-10 9-20 10-11
 11-12 11-14 11-22 12-13 12-17 12-23 14-15 15-16 16-17 16-21 26-27
isolated ring systems :
 containing 1 : 7 :

Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS